

C  
D25 B

Compliments of  
H. G. Jenney -

Jenney

75

# DARTMOUTH COLLEGE.

---

The Relation of the College and  
the Schools.

---

MAY 1, 1893.



## DARTMOUTH COLLEGE.

### THE RELATION OF THE COLLEGE AND THE SCHOOLS.

The committee appointed to consider "the relations of the Chandler school to the college, and the relations of the Thayer school to both" respectfully reports: That it has given earnest attention to the subject, studying the history of the Chandler school, and also the organization and conditions of success in the scientific departments of other colleges, and in the technological schools; that in its whole work it has had intelligent coöperation and most efficient aid from the members of the several faculties who were asked to act with it, and now presents the following facts and recommendations:

The Chandler school was organized as a distinct department or school in the college, receiving students (as the will of Mr. Chandler was understood to require) of a different grade, at a lower tuition, classifying them differently, and having at first a course of only three years. Gradually the standard of admission, and with it the grade of the school, has risen with the advance of the high schools which are a part of the "common school" system, to which Mr. Chandler's will refers. So it has come about that more has been and is demanded of the school than its small endowment can enable it to meet. Its senior professor, in his efforts to supply by extra labor the deficiency in its teaching force, has exceeded his strength and cannot go on; so that for the large classes now making increased demands the best provision that can be made is inadequate, and it is almost impossible to continue long, even doing as much as has been done, while there must be considerable enlargement if the school is to still hold its relative rank. The college cannot properly assist by furnishing instruction in an institu-

tion having a separate organization, and in order to equip the school to do independently a successful work as a technological school, or a school for training "in the practical arts of life," a very much larger endowment would be required than your committee sees any reason to hope could be secured.

Therefore, without coming to the consideration of which of the two plans for the school suggested in the vote of the trustees appointing the committee would be the better, it appears that the plan of complete equipment for separate work is so nearly impossible that it should not be considered, unless the alternative plan of closer union with the college, "so as to furnish scientific courses parallel with the other courses of the college," is found to be objectionable.

Your committee finds that the advancing grade of the Chandler school, with its practically higher conditions of admission, while making its independent maintenance very expensive, is fast bringing it where it is possible to attempt a degree of combination of its work with that of the college which would have been altogether impracticable in its earlier history. It is also a favorable fact that the students already associate in corresponding classes.

The doubt may remain whether for disciplinary purposes the best course that can be arranged in the modern languages, mathematics, and scientific work, can equal the classical course; our question is only whether such a modern language and scientific course can be made so nearly the parallel of the other that students of the two can be associated in the same class without seriously lowering the tone of scholarship in either, and this can be answered in the affirmative if the grade of the new course can be made high enough of its kind. The possibility of so establishing the grade of the Chandler

Dartmouth College. The Relation of the College and  
the Schools. May 1, 1893. 8vo, 27pp, N. P.  
1893.

.75



school, and some other practical matters involved in the more intimate union of the school and the old college, depend upon the interpretation of the will of the founder, of which the visitors are made authoritative expounders. Their formal opinion accompanies this report, and answers the crucial questions.—Whether under the will the standard of the school can be so high that its discipline and scholarship shall be equal to that of other departments of the college, and as a condition to this whether the terms of admission can be made to require such attainments in the modern languages and scientific studies that students entering shall already have a good degree of mental discipline and attainments.—Whether under the will the tuition can be the same as that of the old college, so long as that remains “moderate.”—Whether the condition establishing a “department or school in the college” is met by the maintenance of a department and courses of instruction in the college, without such a separate classification of students as would require them to be made responsible to a purely separate faculty.

These questions, for the answer of which, under the terms of the will, the trustees are not responsible, being thus all answered in the affirmative, your committee recommends that announcement be made, in the catalogue now issuing, of a change to take effect at the beginning of the next college year, whereby the Chandler school shall become a department of instruction in the college furnishing scientific courses parallel with the other courses, with all the students classified together under one faculty, that the professors upon the Chandler foundation become members of this college faculty, that the tuition for all students hereafter admitted shall be the same (namely, \$90), and that the conditions for admission to the Chandler scientific course be raised to include substantially as much of mathematics, physics, and



chemistry as the better high schools furnish, with one full year of French at once, and two upon entrance a year later ;—that the college offer three parallel courses, the classical, the Latin-scientific, and the Chandler scientific, for the degrees respectively of Bachelor of Arts, Bachelor of Letters, and Bachelor of Science, and that the catalogue now issuing contain an announcement of these changes, with particulars of the changed conditions of admission and curriculum. These necessary changes are more particularly indicated in the report of the members of the several faculties, who were requested by the trustees to act with this committee, and that report is commended to the attention of the board for its admirable discussion of the questions involved, and is hereby made a part of the present report. [See “A”.]

In reference to the relations of the Thayer school, your committee finds that the work of the last year in the civil engineering course of the Chandler school is substantially the same as that of the first year of the Thayer school, and therefore recommends that an arrangement be made for such union of classes as may prove to be practicable, and to meet the approval of the overseers of the Thayer school, the work of instruction to be equitably divided by the professors concerned, as outlined in the paper submitted by Professor Fletcher, which is hereby specifically referred to and made a part of this report. [See “B”.]

Respectfully submitted :

ALONZO H. QUINT,  
HENRY FAIRBANKS,  
WM. J. TUCKER,  
J. B. RICHARDSON,

*Committee.*

[The above report was accepted, and its recommendations adopted, by the trustees at a meeting held Dec. 5, 1892.]



## OPINION OF THE VISITORS. I.

---

*To the Trustees of Dartmouth College :*

The visitors provided for in the will of the late Abiel Chandler have carefully examined the report of your committee, appointed to consider the relations of the Chandler school to the college, and also the report of the members of the several faculties acting with that committee, and now desire to express their entire approval of the conclusions reached in both reports.

We gratefully appreciate the effort that has been made by the trustees and the various faculties of the college to improve the condition of the scientific department, and to strengthen it and increase its usefulness by promoting a closer union with the college, and by advancing the standard of scholarship requisite for admission to it.

As representatives of the founder of that department, we most sincerely thank you for the wise thoughtfulness which prompted the inquiry that has been made, and the conscientious desire, evinced in the reports, to conform to his wishes with reference to the foundation, and we trust that the results attained will redound to the honor of the college.

BENJAMIN A. KIMBALL,  
JOHN HOPKINS,  
*Visitors.*

---

## OPINION OF THE VISITORS. II.

---

*To the Trustees of Dartmouth College :*

Mr. Chandler, in his will, expressed an "earnest desire" that the trustees of Dartmouth college should conform to his wishes in respect to the legacy, by him given them, for the establishment and support of a permanent department or school of instruction in the college.

And, in order to insure such conformity, he constituted a perpetual board of visitors, who should "have full power to determine, interpret, and explain" his wishes in respect to the foundation, and to see that his intentions in regard to it were faithfully executed.

Thus empowered and enjoined, with a tender regard for the memory of the founder, and with an earnest desire to promote the interests of the department and the college in its entirety, the visitors respectfully submit the following interpretation and explanation of the wishes of Mr. Chandler:

Two questions will be considered.

First. What relation does the foundation sustain to the college?

Second. What requisites for admission to it may be demanded?

# I.

Obviously the wishes of the founder must be gathered from the instrument wherein they are expressed.

By its terms his purpose was to establish "a permanent department or school of instruction" in Dartmouth college.

The words used, "department or school," were not used by him to indicate two distinct things, with the intent that either one of them might be established and maintained, but rather as two different names for one and the same thing, which should be fairly characterized by both of the terms made use of to describe it.

His desire was to provide a course of instruction which should take rank with, and be a part of, the course of instruction furnished by Dartmouth college; it was not to be extraneous and outside, but an addition to that already provided by the college.

The foundation intended was not something outside and independent of the college, or outside and lacking the fostering and beneficent influence of association and incorporation with it; it was not to be a technological or professional school, forming one of an association or aggregation of schools and colleges, and constituting a university, but simply and purely a department in the college.

The nearness of association which was intended is well expressed by the phrase "in the college."

Mr. Chandler did not desire to found an independent school, or to establish a weak and inefficient institution of learning; he saw clearly that the funds provided would be insufficient to establish and maintain such an opportunity for instruction as he conceived and desired to provide, and he wisely sought to establish, as a part of the college, a permanent department wherein might be obtained a liberal education upon the basis and along the lines indicated in the enumeration of the branches to be taught in it.

He desired and intended it to be a department in the college; as he

well knew the advantages that must come to it from incorporation in it, with its venerable traditions and its reputation for sound learning and for prudent and conservative management.

He wished that those who sought instruction in it should have all the benefits that could come from being part and parcel of the college, and from instruction by the faithful men to whom was committed the duty of educating the earnest young men who resort to it; and he had faith to believe that, under the wise care of the trustees, the long line of eminent instructors would be continued unbroken, so that those for whom he sought to make provision would be assured of the best instruction which the state of the sciences permitted.

He did not intend that those who sought instruction in the department should be set off by themselves, and aside from the general body of students of the college, and be unidentified with it; but, on the contrary, that they should be students of Dartmouth college receiving instruction in one of its departments.

In brief, his wish was that the foundation should be permanent; that it should have all the advantage—which he realized would be very great, that could come to it from being a department in the college; that those who sought it should have all the advantages—which he knew would be very many and very great—that would inure to them from their connection with a department in the college, and from the high quality of the instruction he believed would be furnished by its faithful and able instructors.

Mr. Chandler's first impulse towards a liberal education resulted from contact with students of Dartmouth college, and, though educated elsewhere himself, he always had in the highest regard the college to which he became so liberal a benefactor; and it must be apparent that when he created the foundation his idea was that there should be that intimate relation and close union between that which he was adding and that to which it was added, that is so well expressed by the words "department of instruction in the college," as that he desired it to have all the many advantages which must result from such relationship.

The views here expressed are aided by the interpretation of the will by the trustees at the time the legacy was received.

President Lord delivered at Commencement, July 29, 1852, a discourse commemorative of Mr. Chandler.

His opening sentence was, "I rise, by order of the trustees, to announce the organization of the Chandler School of Science and the Arts, as a new *department of instruction in the college.*"

The relation of the department to the college is thus expressed :

"The management of Mr. Chandler's trust requires a change in the organization of the college. The change is adopted because of certain wants of society, and corresponding social tendencies, which are thought sufficient to warrant, if not to demand, such a modification of the college order. But the change will be modal, and not essential. It will be simple, and, for the present, experimental. It will consist mainly of additions. The regular college course is left untouched. No arrangement is made or contemplated that will diminish the number, quantity, or proportion of the studies or exercises heretofore established as a foundation for the learned professions. These will be liable to be interpenetrated by the spirit and genius of the new department. But the influence will be reciprocal. Nothing will necessarily be lost by either. The system is intended to be one of mutual giving and receiving, with a view to the more natural and perfect development of all the branches, and a greater corresponding usefulness and dignity of the college.

"By this new organization the college receives preparatory students, and classes of under-graduates, who contemplate not the professional but active pursuits of life. It introduces new branches and methods of study adapted to this description of young men; and it creates a new degree—the degree of Bachelor in Science—intended to be equivalent to the degree of Bachelor of Arts.

"The spirit of the department is popular, in distinction from the professional, but with a view to the same beneficial ends.

"Its scope is to elevate mechanical and industrial pursuits, and give to material science and labor a social and political consequence in a higher proportion than they have heretofore held to the professional. It implies that all the departments of knowledge and occupation, though not equally important, are equally necessary to the subsistence and well-being of society; and that they have hitherto not held their natural and proper relation to each other. Its aim is to restore that natural and constitutional propriety.

"The trustees, having accepted Mr. Chandler's trust, are bound to carry it on according to his ideas. But they accepted his ideas first, or they would not have undertaken his proposed work.

"The elementary principle of his charity, as they understand it from his will, and as it is interpreted to them by his visitors, corresponds with the theory of the college. That is, it is not social or political, but moral. The college is a moral being. Its organization and its responsibility are moral. . . . Mr. Chandler's theory is also moral, in distinction from the social and political. . . . He professes not

to stand on any speculative basis. He requires not the trustees to erect a model school, after any pattern of romantic reform, or any partisan or sectarian peculiarities, but on the principles which have been settled for ages and generations.”

## II.

The evident purpose of Mr. Chandler was to furnish young men with opportunities for obtaining an education beyond that which they could obtain at the public charge.

To take them where the public schools left them and carry them forward, under wise teachers, so far as Dartmouth college could carry them without any essential change in its methods and without any disarrangement of its plans and purposes.

To add to the body of students a class of young men who would follow certain lines of study in common with them, receiving instruction from the same teachers in their common studies, but who from natural inaptitude, want of preparation, or from choice, did not desire to pursue a classical course of study.

He found throughout New England a well established system of public schools, supported at the public expense, and providing, with more or less liberality, depending somewhat on locality, for instruction in the elementary branches and nothing beyond; he also found flourishing academies, especially designed to prepare young men for the well known and well settled classical course in our New England colleges.

The advantages of the former were to be had without the payment of tuition, the latter were expensive and the expense was met, in part, by the fees of those attending them.

He did not desire to furnish that which could be obtained freely in the public schools, or to take the pupils out of the public schools, but to supplement the work of the public school systems of New England. Accordingly, he provided in his will that “No other or higher preparatory studies are to be required, in order to enter said department or school, than are pursued in the common schools of New England.”

This was equivalent to saying that the trustees might make as requisites for admission, proficiency in such studies as are pursued in the common schools of New England.

In determining, interpreting, and explaining his wishes in respect to the department which he founded, it is essential that his understanding of the phrase “common schools” should first be interpreted and determined, and that an answer should be given to the question, What did he mean by *common* schools?



It is first to be noticed that in his day the schools of New England which were provided for by law and supported at the public expense were not officially known as "*common* schools," with the exception hereinafter noted, and the same has been true from that time forward, and is now.

An examination of the statutes of the various states of New England conclusively shows that such schools were called *public* schools, and by that name alone were known to the laws creating them, except as hereinafter noted; this will appear from the citations from the various statutes hereinafter made.

By common schools he meant those belonging equally to the public, those serving the use of all; those maintained at the public expense; those that were to be enjoyed without expense to the individual; in brief, those known to the law as *public* schools.

The department was intended to be a permanent one, in the sense that it was to have a continuous and not intermittent existence for all time, but the standard of admission existing in the mind of its benefactor at the time of its creation was not intended to be inflexible and unvariable.

It cannot for a moment be conceived that the broad-minded, far-seeing founder did not foresee that great advances would be made in educational matters in the public schools, and opportunities for higher attainments would be there afforded, and a fair conclusion is that he desired that the standard for admission to the department should be advanced, from time to time, so as to conform to that attained in the public schools in all times thereafter.

In order to an understanding of what the requisites for admission to the department were in the beginning, and what they may now be, it is necessary to refer to the statutes of the various New England states, in force in 1851, and those now in force relating to public schools.

The constitution of the state of Maine provides: "A general diffusion of the advantages of education being essential to the rights and liberties of the people, to promote this important object the legislature are authorized, and it shall be their duty to require, the several towns to make suitable provision, at their own expense, for the support and maintenance of *public* schools . . ." Constitution of Maine, Art. VIII.

The revised statutes of Maine, in the revision of 1847, provided as follows:

Chap. 17, Sec. 12: "Every town . . . shall choose by ballot a superintending school committee."

Sec. 41: "All superintending school committees . . . shall perform the following duties, to wit: . . . Thirdly: *to direct the general course of instruction* and what books shall be used in the respective schools."

It will be observed that in this revision there is no enumeration of the subjects of study in the public schools, but it is left to the determination of the superintending committee.

In the revision of 1857 provision is made for the election of a superintending committee and, among other things, their duty is thus provided for:

"Second: . . . they shall examine him [a candidate for teacher] in reading, spelling, writing, English grammar, geography, history, arithmetic, *and other branches usually taught in public schools*, and particularly for the school for which he is examined.

"Third: They shall give to each candidate found competent, a certificate that he is qualified . . . to instruct in the branches above-named and *such other branches* as are necessary to be taught therein."

It is plain from these provisions that the capacity of the public schools was not intended to be limited to the few subjects enumerated in the statutes.

In the revision of 1883, which is for our purpose the law of to-day, under Chap. 11, entitled "Education of Youth," Sec. 18 provides for the election of a superintending committee.

Their duties are prescribed in

Sec. 87: "II . . . they shall examine him [the candidate for teacher] in reading, spelling, English grammar, geography, history, arithmetic, book-keeping, physiology, *and such other branches as they desire to introduce* in public schools . . . ."

IV. "Direct the general course of instruction."

Sec. 28 provides that, under certain conditions, any town may receive state aid for the support of free high schools.

Sec. 31 provides as follows: "The course of study in free high schools shall embrace the ordinary English academic studies, especially the natural sciences in their application to mechanics, manufactures, and agriculture, but the ancient and modern languages shall not be taught therein, except wholly at the expense of the city, town, district, or union of districts maintaining such schools . . . . When such school is established . . . it shall be free."

It thus appears that the preparation afforded by the *public* schools of Maine, including therein the free high schools, is of high order and that it has been progressive in its character.



In the revised statutes of New Hampshire, revision of 1854, provision is made for the public schools as follows:

Title XI is entitled "Of Public Instruction."

By Chap. 76, Sec. 1: "The selectmen shall assess upon polls and ratable estates" a certain sum.

Sec. 3: "Such sum . . . shall be appropriated to the sole purpose of keeping an *English* school or schools . . . for teaching reading, writing, English grammar, arithmetic, geography, together with *such other branches* of English education as are adapted to the advancement of the school . . . ."

By Chap. 79 any two or more districts may unite and establish and maintain a high school. Under Sec. 6 the teacher of such high school shall be competent to teach, in addition to the branches taught in the district or English school, "history, philosophy, chemistry, botany, book-keeping, surveying, geometry, algebra, logic, and rhetoric, all which branches, and also the ancient and modern languages, may be taught in such high school."

School districts were also authorized to adopt the provisions of an act of 1848, which authorized them to keep and maintain "one or more high schools in which may be taught all the branches usually taught in English grammar schools and such additional branches as the superintending committee may direct."

The public statutes of New Hampshire, compilation of 1891, under Title XII, entitled "Of Public Schools" provides in Chap. 88, Sec. 1, for the assessment of a school tax.

Sec. 3 is as follows: "The sums so raised shall be appropriated to the sole purpose of maintaining *public* schools within the town for teaching reading, writing, English grammar, arithmetic, and such *other branches* as are adapted to the advancement of the school . . . ."

By Chap. 89, Sec. 9: "Any school district may by vote or by law establish and maintain a high school in which the higher English branches of education and the Latin, Greek, and modern languages may be taught."

New Hampshire appears to have made ample provision in her statutes for increasing the usefulness and advancement of her public schools.

Vermont is believed to be the only one of the New England states that, in 1851, used in its statutes as a distinctive title the expression "Common Schools."

Chap. 20, of the "Compiled Statutes of the State of Vermont," compilation of 1851, is entitled "Common Schools."

Sec. 15 of the chapter is as follows :

“Each organized town shall keep and support one or more schools, provided with competent teachers, of good morals, for instruction of the young in orthography, reading, writing, English grammar, geography, arithmetic, history of the United States, and good behavior.”

By Sec. 54 the district might vote to have two or more schools in the district at the same time, and by Sec. 55 it might “direct the teacher of the higher or central school of the district to teach any of the sciences or higher branches of a thorough education, which may not by existing laws have been authorized” and this Section 55 had been the law since 1844.

It will be observed that this Section 55 forms a part of Chapter 20, and its provisions are applicable to common schools as there designated.

It is doubtless within the memory of many Dartmouth students, who taught school in the districts of Vermont during the long winter vacation in the college, that they were called upon to teach not only all the English branches that they had studied in college but, in many instances, Latin besides.

In the “Revised Laws of Vermont,” revision of 1880, under “Title X, Public Instruction,” Chap. 33 provides for the “Maintenance of schools” and we miss the phrase “Common Schools.”

Sec. 558 provides, “one or more schools shall be maintained in each town for the instruction of the young in reading, writing, spelling, English grammar, geography, arithmetic, freehand drawing, history, and constitution of the United States and good behavior.”

Chap. 35 is of “Graded, central, and union schools.”

Sec. 572 is as follows: “If the children of a school district are so numerous as to require more than one teacher, the district may at a district meeting vote to erect as many school-houses and provide as many teachers as necessary . . . and may direct the sciences or higher branches of study to be taught in one of such schools.”

So that in Vermont there may be various grades of district schools, formerly embraced in the designation of common schools, in which many and various studies of a high order are provided for.

Massachusetts is the only one of the New England states that limits, by a definite enumeration, the subjects of instruction in the public schools.

In the revision of the statutes made in 1836, and known as the “Revised Statutes,” Chap. 23 is entitled “Of the Public Schools.”

Section 1 of the chapter is as follows: “In every town . . . there shall be kept . . . at the charge of the town, by a teacher

of competent ability and good morals, one school for the instruction of children in orthography, reading, writing, English grammar, geography, arithmetic, and good behavior . . . .”

By Sec. 1 of Chap. 56 of the acts of 1839 there was added to this list “the history of the United States,” and no further additions were provided for until 1858 when, by Secs. 1 and 2 of Chap. 5, of the acts of that year, the following provision was made: “Algebra, vocal music, drawing, physiology, and hygiene shall be taught, by lectures or otherwise, in all the *public* schools in which the school committee deem it expedient.”

By Sec. 5 of Chap. 23, of the Revised Statutes: “Every town containing five hundred families or householders, *shall* . . . maintain a school to be kept by a master . . . who shall, in addition to the branches of learning before mentioned, give instruction in the history of the United States, book-keeping, surveying, geometry, and algebra, . . . and in every town containing four thousand inhabitants the said master shall, in addition to all the branches before required . . . be competent to instruct in the Latin and Greek languages, and general history, rhetoric, and logic.”

The provisions of this chapter remained in force until 1852 when, by Chap. 123 of the acts of that year, it was enacted, “That *every* town *may*, and every town containing five hundred families or householders *shall*,” maintain a school wherein should be taught, in addition to the branches enumerated in Chap. 23 of the Revised Statutes, general history, natural philosophy, chemistry, botany, the civil polity of the commonwealth and of the United States, and the Latin language. And in every town containing four thousand inhabitants instruction should be given in the “Greek and French languages, astronomy, geology, rhetoric, logic, intellectual and moral science, and political economy.”

The comprehensive course of study provided for in these statutes remains practically unchanged to the present time.

It will be seen that the various schools provided for were not distinguished, the one from the other, by any descriptive or distinguishing name, but all were embraced under the general name of *public* schools.

By Chap. 226 of the acts of 1868, however, it is enacted that towns may maintain a *high* school, and thenceforward this advanced grade of public schools has been known by that distinctive name. The term “Common Schools” is nowhere used in the statutes of Massachusetts, but the expression “Public Schools” covers schools of every grade maintained at the public expense.

The revised statutes of Rhode Island, revision of 1857, under "Title XIII, of Public Instruction" provide for *public* schools:

Sec. 1 of Chap. 60 is as follows: "Any town may establish and maintain . . . a sufficient number of *public* schools, of *different* grades . . . ."

Sec. 1 of Chap. 63 provides: "Any two or more adjoining school districts in the same or adjoining towns, may, by a concurrent vote, agree to establish a secondary or grammar school, for the older and more advanced children of such districts."

Chap. 66 treats of the powers and duties of school committees, and Sec. 10 provides, "They shall . . . prescribe the studies to be pursued therein."

By the public statutes of Rhode Island, enacted in 1882, under "Title IX, Public Instruction," Chap. 47 provides, "The general supervision and control of the *public* schools . . . shall be vested in a state board of education." "The board . . . shall elect the commissioner of *public* schools."

By Chap. 56, Sec. 9: "The school committee shall make . . . rules and regulations . . . for the instruction, government, and discipline of the *public* schools, and shall prescribe the *studies* to be pursued therein under the direction of the commissioner of public schools."

These statutes evidently contemplate a change from time to time in the branches to be taught.

The Connecticut statutes, compiled in 1854 under "Title X, an act concerning education", make provision for the schools of that state.

Sec. 11 of Chap. 2 is as follows: "Every school society established as such by the general assembly . . . shall have power to establish and maintain *common* schools of *different* grades . . . ."

Sec. 22: "The board of visitors shall prescribe rules and regulations for the management, studies, books, classification . . . of the schools of the society."

Sec. 3, 1854: "Every school district . . . shall be a body corporate and politic with power . . . to establish and maintain common schools of *different* grades."

Thus it appears that in Connecticut, up to 1854, the branches of study required to be taught were not enumerated, but provision was made for schools of different grades, all known as common schools.

By the general statutes of Connecticut, 1888, it is provided in Sec. 2118, "Public schools shall be maintained . . . in every school district. . . . In said schools shall be taught . . . reading,

spelling, writing, English grammar, geography, and arithmetic, and *such other studies* . . . as may be prescribed by the board of school visitors."

By Sec. 2215: "In addition to the schools required by law in every town, any town may establish and maintain schools of a higher grade within its limits . . . ."

"When any town shall maintain such school of a higher grade, the board of school visitors shall prescribe rules for admission of scholars to it and for their studies, books, and classification."

Chap. 141 of the same compilation is entitled, "Support of Public Schools."

An examination of the foregoing extracts from the statutes of the several New England states shows that, at about the time Mr. Chandler's will went into effect, there was no uniformity in the systems of education, in the nomenclature employed to represent the various schools, or in the course of study pursued in them; the only thing they had in common was this: they were all maintained at the public expense.

In two states only, Vermont and Connecticut, do we find the term "common schools" employed. In the former state it includes "district schools," "graded," "central," and "union schools;" in the latter it embraced all the public schools of *different grades*.

In New Hampshire provision was made for an "English school" and "union high school."

In Maine, Massachusetts, and Rhode Island the comprehensive term "public schools" was used.

In Massachusetts and Vermont the courses of study and branches to be pursued were fixed and determinate, with the exception that in the latter state some latitude, in this respect, was recognized in the case of central schools.

In Maine, the school committee were empowered to "direct the general course of instruction and what books shall be used."

In New Hampshire the youth were to be taught "such other branches of English education as are adapted to the advancement of the schools."

In Rhode Island the school committee were to "prescribe the studies to be pursued."

In Connecticut the board of visitors were to "prescribe . . . the studies" in the different grades. But, in spite of all this diversity, they were common schools in the sense that, in all their grades, they were maintained at the public expense, and so were distinguishable from the academies and other preparatory schools which were not thus main-



tained, and the purpose of Mr. Chandler was to make the requisites for admission to the department conform to, and be no other or higher than, the standard that might, from time to time, be attained in the public schools of New England, but always within the lines enumerated by him in his will.

This interpretation is alike honorable to the founder and elevating to the department. Action in accordance with it, it is believed, will bring to the department students having that thoroughness of preparation for its work, that will enable them to reap the full advantages intended by the foundation, and to honorably maintain its dignity as a department in Dartmouth college.

BENJAMIN A. KIMBALL.

JOHN HOPKINS.

---

[Additional Memorandum by the Visitors.]

The visitors are of the opinion that it is competent for the trustees to require for admission to the Chandler Scientific department so much French, physics, and chemistry as is taught in the public schools of New England, including under that term the high schools that are maintained at the public charge. Also that the tuition be the same as that prescribed by the trustees for the academic department.

“A.”

*To the Committee of the Trustees on the Relations of the Chandler School and the College, and the Relations of the Thayer School to both the Chandler School and the College.*

The undersigned members of the several faculties, having been requested by a vote of the board, passed June 29, 1892, to act with you “in obtaining information, with a view to determining whether the policy of the board should be to continue the Chandler school as a separate organization, securing funds for the enlarging of its work in the direction of the ‘practical arts of life,’ or to unite it more closely with the college, so as to furnish scientific courses parallel with the other courses of the college,” immediately upon receiving official notification of that request, entered upon the discharge of their duties, sought information from all available sources, held frequent consultations and reviewed all relevant evidence obtainable, and hereby respectfully report that they are unanimously of opinion:

1. That it would be unwise for the board to continue the Chandler school as a separate organization, securing funds for the enlarging of its work in the direction of the practical arts of life, and for the following reasons: (1) The Chandler school, as a separate organization, with an increase of its funds and its development as a technological school would, it seems to us, necessarily involve duplication of some part of the plant and much of the instruction now offered by the college. (2) Such separate organization, with increase of funds and development as a technological school, must tend to the creation of friction in its actual workings as a school or department in the college. (3) Recent history of technological schools associated with colleges in New England, tends to prove that the demand for the kind of instruction offered by such schools has been overestimated; and the cases in which such schools are meeting with the highest degree of success are those of schools so highly endowed and so located that no inference from their success would be justifiable in the case of a technological school located in Hanover. (4) If demand exists in northern New England for a technological school, it presumably will be satisfied by the two projected institutions, the state college to be established at Durham,



which will be the recipient of governmental aid, and the Wolfeborough academy, whose trustees have voted to provide such courses of instruction and have at their disposal a large endowment.

2. That the permanent interests of the college, the Chandler school, and the Thayer school, demand the adoption by the board of the alternative policy referred to in its vote of June 29, 1892, to wit: The policy of uniting the Chandler school more closely with the college, so as to furnish scientific courses parallel with the other courses of the college, and of a re-arrangement of certain courses of the Chandler school, and the Thayer school, so as to enable these institutions associated with Dartmouth college to offer both a short and a long course in engineering. The adoption of this policy would, it is believed, have the following advantages: (1) It would prevent the duplication of expensive plants by the college and the Chandler school for scientific instruction, and the duplication of courses of instruction both in the college and the Chandler school, and in the Chandler school and the Thayer school. The large saving which may be effected by use of the same plant for scientific courses is apparent. Comparison of the schedules of the Chandler school and the college shows that, while there is considerable variation in the number of exercises devoted to each topic, instruction is given in the Chandler school in only seven topics in which no instruction is given in the college, to wit: Book-keeping, Roman History, Isometric Drawing, Mechanical Drawing, Freehand Drawing, Structural Botany, and Engineering. In two of these topics, Book-keeping and Roman History, instruction appears to be offered because one is legally required and the other happens to be convenient. The topic of Structural Botany is admitted to be a proper study for the Latin scientifics in the college. The remaining four topics may properly be classed as two, Drawing and Engineering, and these, broadly speaking, are the only topics of importance taught in the Chandler school in which no instruction is given in the college. Comparison of the schedules of the Chandler school and the Thayer school discovers the fact that a considerable part of the engineering work in the first year's course in the Thayer school is a duplication of the engineering work of the last year's course in the Chandler school. Such economic waste as is implied by this duplication would, it is believed, be prevented by the adoption of the policy recommended. (2) Such a policy would enable Dartmouth college, through the Chandler school more closely united with it, to furnish scientific courses more thorough, continuous, and complete than it is now able to offer. (3) Such a policy would enable the Chandler school, by relieving it of a

part of the expense now imposed upon it by its offer of non-scientific courses of instruction, to more completely fulfil the intended objects of its founder. (4) Such a policy would tend to build up the Thayer school, by bringing the scientific courses of the Chandler school in the college into more direct relation with its own courses and by giving it, as a graduate school, the advantages of a more direct relation with a preparatory course immediately connected with it. (5) Such a policy would tend to unify the interests of Dartmouth college and its associated institutions, and to strengthen all by strengthening each.

3. That in view of the existing relations between the college, the Chandler school, and the Thayer school, the most practicable mode of giving effect to such a policy as is herein recommended, if it should be adopted by the board, would be by its official authorization of a general plan, to take effect in September, 1893 (leaving all details of the involved schedules to be worked out by the different faculties, and referring all financial adjustments made necessary to a finance committee or to the treasurer of the college), whose principal features might be announced in the forthcoming catalogue substantially as follows :

#### COURSES OF INSTRUCTION.

The college offers to its students the option of three parallel courses of study, each extending through four years, to wit :

- (1) The Classical course.
- (2) The Latin Scientific course.
- (3) The Chandler Scientific course.

The studies to be pursued in each of these courses are prescribed and elective, in addition to which certain optional courses are offered in senior year. In the Classical course, to be pursued by candidates for the degree of Bachelor of Arts, the study of Latin, Greek, and Mathematics forms a large part of the required work of the first two years.

In the Latin Scientific course, to be pursued by candidates for the degree of Bachelor of Letters, the studies pursued are the same as in the Classical course, excepting the prescribed courses in Greek, in place of which are prescribed additional courses in Modern Languages, Science, and Mathematics.

In the Chandler Scientific course, to be pursued by candidates for the degree of Bachelor of Science, both Greek and Latin are omitted, and in their place are prescribed additional courses in Modern Languages, Science, Engineering, and Mathematics.

## ADMISSION.

All candidates must present satisfactory testimonials of good moral character; and those who have been members of other colleges must exhibit certificates of regular dismissal.

The times for admission are the Monday and Tuesday before Commencement, and the Tuesday and Wednesday before the beginning of the first term.

Candidates in 1893 will present themselves with their credentials at the President's room at either of the following hours: On Monday, June 26, at 2:30 p. m., and Tuesday, June 27, at 9:00 a. m.; on Tuesday, September 12, at 2:30 p. m., and Wednesday, September 13, at 9:00 a. m., and 2:30 p. m.

*Examinations.*—Examinations for admission are held in Commencement week, and also at the beginning of the first term. They are held in Culver hall, and begin at 3:00 p. m., on Monday, June 26, and on Tuesday, September 12, continuing in both cases through the following day.

Attendance is required at the beginning of the examinations.

*Classical Course.*—Candidates for the freshman class in the Classical course are examined in the following books and subjects, or their equivalents:

*Greek.*—I. Xenophon's *Anabasis*, Books i-iv; Homer's *Iliad*, Books i, ii; Greek Grammar, including prosody; Writing Greek,—Jones's *Greek Prose Composition*, twenty exercises. Or, as an alternative,—

II. Translation at sight of average passages from Xenophon and from the *Iliad*; Translation into Greek of simple sentences (a vocabulary of the less used words being suggested or supplied in each case); general questions on Greek grammar and prosody.

*Latin.*—I. Caesar's *Gallie War*, Books i-iv (or either Sallust's *Jugurtha* and *Catiline*, or Caesar's *Civil War*, Books i-iii); Cicero, six orations; Virgil's *Georgics* (or *Georgics*, Books i-ii, and *Eclogues*), or Ovid's *Metamorphoses*, 4,000 lines, and Virgil's *Æneid*, Books i-vi; Latin Grammar, including prosody; Writing Latin—Translation of simple sentences into Latin prose. Or, as an alternative,—

II. Caesar's *Gallie War*, Books i-iv, or Caesar's *Civil War*, Books i-iii (or Sallust's *Catiline*, and either Books i-iii of the *Gallie War*, or Books i, ii of the *Civil War*); Cicero's *Orations* against *Catiline* and for *Archias*, with questions on the subject-matter and on grammar; Virgil's *Æneid*, Books i-iv (or *Eclogues*, and *Æneid*, Books i-v), with questions on the subject-matter and on prosody; Translations at

sight of average passages from Caesar, Cicero's Orations, Virgil's *Æneid*, and Ovid's *Metamorphoses*, with general questions on grammar, history, antiquities, and prosody, suggested by the passages prescribed; Translation into Latin of a passage of connected English narrative based upon some portion of the prescribed prose.

NOTE.—In addition to the use of text-books, it is recommended that pupils be accustomed from the beginning of their preparatory course to translate into Greek and Latin, both orally and in writing, passages prepared by the teachers on the basis of the principal authors read.

*Mathematics*.—Arithmetic, including the metric system; Algebra, to quadratics; Plane Geometry.

*English*.—The examination will consist in the criticism of specimens of incorrect English, together with a short essay, correct in spelling, punctuation, division into paragraphs, grammar, and expression, on a subject to be announced at the time of the examination. In 1893 the subject will be taken from one of the following books: Shakespeare's *Julius Caesar* and *Twelfth Night*; Scott's *Marmion*; Longfellow's *Courtship of Miles Standish*; the *Sir Roger de Coverley Papers* in *The Spectator*; Macaulay's second *Essay on the Earl of Chatham*; Emerson's *American Scholar*; Irving's *Sketch-Book*; Scott's *Ivanhoe*; Dickens's *David Copperfield*. In 1894, Shakespeare's *Julius Caesar* and *Merchant of Venice*; Scott's *Lady of the Lake*; Arnold's *Sohrab and Rustum*; the *Sir Roger de Coverley Papers* in *The Spectator*; Macaulay's second *Essay on the Earl of Chatham*; Emerson's *American Scholar*; Irving's *Sketch-Book*; Scott's *Abbot*; Dickens's *David Copperfield*. In 1895, Shakespeare's *Merchant of Venice* and *Twelfth Night*; Milton's *L'Allegro*, *Il Penseroso*, *Comus* and *Lycidas*; Longfellow's *Evangeline*; the *Sir Roger de Coverley Papers* in *The Spectator*; Macaulay's *Essay on Milton* and *Essay on Addison*; Webster's first *Bunker Hill Oration*; Irving's *Sketch-Book*; Scott's *Abbot*. In 1896, Shakespeare's *Merchant of Venice* and *Midsummer Night's Dream*; Milton's *L'Allegro*, *Il Penseroso*, *Comus* and *Lycidas*; Longfellow's *Evangeline*; Macaulay's *Essay on Milton*; Webster's first *Bunker Hill Oration*; DeFoe's *History of the Plague in London*; Irving's *Tales of a Traveler*; Scott's *Woodstock*; George Eliot's *Silas Marner*.

*History and Geography*.—Outlines of Greek History (to the death of Alexander) and of Roman History (to the death of Marcus Aurelius); American History; Outlines of Ancient Geography; Modern Geography.

*French*.—The French language is not required for admission, but will be accepted, and candidates who have had one year's study of

French (not less than one hundred and fifty recitations) and have passed an examination in Otto's French Grammar, Part I, with the Reading Lessons (or an equivalent), will have the privilege of pursuing the study in an advanced division.

*Latin Scientific Course.*—Candidates for the freshman class in the Latin Scientific course are examined as follows :

In Latin.—Same as for Classical course.

In Mathematics.—Same as for Classical course.

In English.—Same as for Classical course.

In History and Geography.—Same as for Classical course.

In Physical Geography (Guyot's)—Elementary Human Physiology, and Phenogamic Botany.

In French—Edgren's French Grammar complete; not less than 500 duodecimo pages of French prose and poetry; the first 57 pages of Macmillan's First Book of French Composition.

*Chandler Scientific Course.*—Candidates for the freshman class in the Chandler Scientific course are examined in the following subjects :

*Mathematics.*—Same as for Classical course.

*English.*—Same as for Classical course.

*History.*—Same as for Classical course.

*Geography.*—Same as for Classical course.

*Human Physiology.*—Same as for Latin Scientific course.

*Phenogamic Botany, after 1892-3.*—Same as for Latin Scientific course.

*French.*—The work of one year in college or its equivalent, and after 1893-4, the equivalent of two years' work in college. An equivalent of German will be accepted instead of French.

*Physics.*—Gage's Introduction to Physical Science, or an equivalent.

*Chemistry.*—Remsen's Shorter Course in Chemistry, or its equivalent. A student who has pursued a laboratory course will receive credit for such work upon presenting his original note-book with the record of his experiments properly certified by his instructor.

The recommendations of Prof. Fletcher of the Thayer school, for preventing the existing duplication of courses of instruction in the Chandler school and the Thayer school, and his recommendations respecting the coöperation and division of labor between the instructors of these two schools, having been transmitted to your committee, are herein formally referred to and made by such reference a part of this report, in which all the members of this committee of the different faculties heartily concur. If the policy herein recommended should be adopted by the board, and the plan suggested for carrying it into exe-



cution should be authorized, proper announcements should also be made in the forthcoming catalogue respecting the proposed short and long courses of engineering in the Chandler school and the Thayer school.

In conclusion, it remains to be added that we have not deemed it wise to consider questions relating to the schedule, the degree of correspondence of studies in the Latin Scientific and the proposed Chandler Scientific courses during Freshman and Sophomore years, or the most desirable grouping of studies, or the proper range of electives, or the prescribed courses of study for students in the proposed Chandler Scientific course during junior and senior years, in advance of the determination by the board of its general policy; nor have we deemed it within our province to consider any legal questions which may be raised by the proposals herein made.

JAMES F. COLBY,  
JOHN K. LORD,  
EDWARD R. RUGGLES,  
ROBERT FLETCHER,  
*Of the Faculties.*

---

## “B.”

*Memorandum or Statement for the Committee of Conference of the Trustees of Dartmouth College, submitted by the Director of the Thayer School of Civil Engineering.*

[Subject to approval of the Board of Overseers of the Thayer school.]

WHEREAS, It is desirable to perfect a general plan for the unification and enlargement of the courses of scientific and technical study at Dartmouth college, to avoid duplication of work, to secure more efficient direction of the teaching force, and to offer better facilities and inducements for *post-graduate* study: THEREFORE, After conferences with representatives of the college and the Chandler school, the director of the Thayer school concurs in the belief that a plan of coöperation or adjustment, something like the following, is feasible, to wit:

1. The Thayer school can arrange its courses of study so as to offer to all who may pass its examinations for admission a shorter course of study in civil engineering, during the *first year*. Students who may be admitted to such course from the scientific department of the

college may have such essentially post-graduate study made available as the last year's work for the degree of B. S. from the college.

2. The Thayer school would then offer, during its second year, an advanced course of study in civil engineering, and all students pursuing both years of study in the Thayer school will receive the *degree of civil engineer* on recommendation of the board of overseers.

3. Interchanges of instruction between the professors of the Thayer school and the Chandler professor of civil engineering may be arranged so that the work of instruction for the first year of the civil engineering course may be equitably shared. The details of such arrangement shall conform to the programme of the Thayer school, which may be modified in some respects to suit the case, *provided* the *standard* is maintained unimpaired.

No pecuniary considerations for instruction thus given by exchange shall be paid or received by either party, but exchanges shall be made equivalent by mutual agreement.

4. Students thus having instruction in the Thayer school shall be rated as Thayer school students, and be subject to all its regulations, now or hereafter, in force, as to examinations, charges for tuition, etc.<sup>1</sup>

ROBERT FLETCHER.

P. S. After being requested to submit a proposition in writing to the committee of the trustees, then in session, there was no time to refer the matter to the board of overseers for first consideration. The previous deliberations had been only of a tentative nature, with no assurance of a definite plan. Necessarily, "we" were entirely independent in the discussion, but were willing to *assent* to any proper arrangement which did not impair our independence. No "alliance" would be advisable.

<sup>1</sup> To this should be added the words *in the Thayer school*.

[The overseers of the Thayer school have assented to the plan proposed.]





3 0112 105624081